SMAR 2017 – Fourth Conference on Smart Monitoring,
Assessment and Rehabilitation of Civil Structures

SMAR 2017

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Materials Science and Technology

Key dates

Submission of Abstracts	31 December 2016
Abstract Acceptance Notification	31 January 2017
Submission of Full Lengths Papers	31 March 2017
Paper Acceptance Notification	10 June 2017
Early Bird Registration	30 June 2017
Submission of Final Revised Papers	31 July 2017
Pre-Conference Scientific Tour	12 September 2017
SMAR 2017 Conference	13 – 15 September 2017

The official language of the conference is English.

Registration Fee

Early Bird Registration until 30 June 2017	€ 700.00 and € 250.00 for students
Standard Registration after 30 June 2017	€ 800.00 and € 350.00 for students

Registration fee includes:
Conference documentation of full papers, conference reception and conference dinner,
3-days catering, coffee breaks and lunches
Accompanying persons (none scientists) and visitors to exhibition   € 200.00*
*including: Conference reception, conference dinner, 3-days catering, coffee breaks and lunches

Accommodations see: **www.smar2017.org** and **www.zuerich.com/en**

Pre-Conference Scientific Tour

To be announced soon

Conference Secretaries

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Email: secretariat.smar2017@gmail.com

Conference website: www.smar2017.org

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Invitation for Conference SMAR 2017 in Zurich
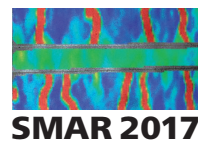
SMAR 2017 Zurich

**Fourth Conference on Smart Monitoring,
Assessment and Rehabilitation of Civil Structures**
SMAR 2017, Zurich / Switzerland
13 – 15 September 2017
ETH Zurich
Conference website: www.smar2017.org

Scope

The International Conference on Smart Monitoring, Assessment and Rehabilitation of Civil Structures, SMAR 2017, will provide a forum for international scientists, engineers, enterprisers and infrastructure managers to present and discuss the state-of-the-practice and recent advances in testing and monitoring technology, in structural modeling and assessment methods, and in the application of advanced materials for structural rehabilitation. The conference will provide a platform for exploring the potential of international cooperation.

SMAR 2017 is the fourth conference and will be sponsored jointly by the International Society for Structural Health Monitoring of Intelligent Infrastructure (ISHMII), the International Institute of FRP in Construction (IIFC) and RILEM.

Topics

Structural Health Monitoring
– Smart sensors
– Wireless sensor networks
– Implementation of structural monitoring
– Monitoring of off-shore structures and
  oil pipelines
– Monitoring of high rise buildings and bridges
– Advanced inspection and testing
– System identification and model updating
Performance and damage assessment
– Safety evaluation and reliability forecast
Damage control, repair and strengthening
– External strengthening using FRP composites
– Strengthening of concrete, timber and
  steel structures
– Confinement of concrete columns
– Near surface mounting reinforcement
– Seismic Safety Assessment, Rehabilitation
  and Monitoring

Durability issues as related to harsh environments
– Fire protection systems
Shape memory alloys in civil structures
– Nickel-titanium, Copper on Iron-based SMA
– Application of SMA for civil structures using
  special properties such as Damping,
  Superelasticity, Shape memory effect of
  Ductility
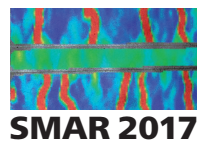**Practical applications and case studies**
Visionary Concepts
Special sessions
– Strengthening, Monitoring and Life-cycle
  Assessment of Metallic Structures
– In honor of Professor Urs Meier's lifetime
  achievements: "25 years of CFRP in
  construction – materials from aerospace
  make career in civil engineering"
– Vibration-based Structural Health Monitoring

Mirko Roš award for the best papers

– 1 paper in the field of "monitoring and assessment" and
– 1 paper in the field of "rehabilitation of civil structures"
Selected best papers will be proposed for publication in a Journal Special Issue of the Polymer Journal (online, open access) or in the Bulletin of Earthquake Engineering (Springer), dedicated to SMAR 2017 conference.

Conference Venue

City/Country: Zurich/Switzerland   Venue: ETH Zurich
Date: 13 – 15 September 2017   **www.ethz.ch/en**

The conference will be held at ETH Zurich, Campus Hönggerberg Zurich.
Transports by train or tram are available from Zurich Airport to Zurich Main Station.
Tramways and buses will take you to the Hotels and to ETH Zurich, Campus Hönggerberg.

Conference Chairs

Professor Masoud Motavalli (Empa, Switzerland)
Professor Alper Ilki (Istanbul Technical University, Turkey)

Organization Committee (OC)

Bernadette Havranek, Empa; Robert Widmann, Empa; Daniele Inaudi, Smartec; Eleni Chatzi, ETH Zürich; Caglar Goksu, ITU; Mustafa Comert, ITU; Cem Demir, ITU; Ugur Demir, ITU

International Scientific Committee

Council members of ISHMII, IIFC and others, as announced on the conference website
www.smar2017.org

Keynote Lecturers

Prof. Riadh Al-Mahaidi, Swinburne University of Technology, Australia
"Advanced hybrid experimental/simulations strategies for safer structures"
Prof. Katrin Beyer, EPF Lausanne, Switzerland
"Seismic retrofit of cultural heritage buildings – when less is more"
Prof. Sam Kono, Tokyo Institute of Technology, Japan
"Efforts to develop resilient reinforced concrete building structures in Japan"
Prof. Stefano Pampanin, University of Canterbury, New Zealand
"Towards the practical implementation of performance-based assessment and retrofit strategies for RC buildings: challenges and solutions"
Prof. Oded Rabinovitch, Technion, Israel Institute of Technology, Israel
"Dynamic modeling challenges in strengthening existing structures with advanced composites"
Dr. Andreas Winistörfer, Carbo-Link AG, Fehraltorf, Switzerland
"Solving Structural Engineering Challenges using Carbon Fibre tension members"

Sponsors

Local and international companies and institutions providing sensors, monitoring systems, FRP composites and other materials and systems for structural rehabilitation.

Exhibition

Manufactures and exhibitors in the field of smart monitoring, assessment and rehabilitation of Civil Structures are invited to reserve their stands at the conference SMAR 2017 in Zurich.